



STATEMENT OF BASIS
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 BAQ Engineering Services Division

Company Name:	MacLean Power Systems – Newberry Plant	Permit Writer:	Urva Patel
Permit Number:	TV-1780-0045	Date:	DRAFT

DATE APPLICATION RECEIVED: October 12, 2015

FACILITY DESCRIPTION

Maclean Fiberglass (Maclean) operates a manufacturing facility located near Newberry, Newberry County, South Carolina that produces fiberglass products. The fiberglass products include rods and cross-arms that are used in association with electrical power.

Pultrusion is essentially a process of extrusion accomplished by pulling the material through the process. Fiberglass contained on rolls or creels is purchased as a raw material for the facility. The fiberglass reinforcing fibers are pulled from each creel through one of the Pultrusion lines by a mechanical puller located near the end of the process. The fibers are pulled through a liquid resin mix bath in the wet-out tank and then into a heated, machine die. The heated die initiates an exothermic reaction that polymerizes the thermosetting resin mix.

After exiting the heated die puller, the extruded fiberglass parts are cut to the desired length by inline cut-off saws on each of the Pultrusion lines. Additional cutting and finishing of parts, if required, is accomplished using chop-saw and belt sanders. The parts are then finished by punching, drilling or surface coating, as needed, and then prepared for shipping to customers.

PROJECT DESCRIPTION

The facility sent an application for the renewal of their Title V operating permit.

CHANGES SINCE LAST OP ISSUANCE

The Bureau of Air Quality (Bureau) has received your letter on February 26, 2014 regarding the exemption request for the Pultrusion Machine at MacLean Fiberglass. the source will be incorporated into the Title V Operating Permit as a permitted source and have the same opacity and MACT requirements as those sources permitted under ID 04 – Pultrusion Process.

SOURCE TEST REQUIREMENTS

EMISSIONS

FACILITY WIDE EMISSIONS		
Pollutant	Uncontrolled Emissions	Controlled/Limited Emissions
	TPY	TPY
PM	77.8	0.078
PM ₁₀	77.8	0.078
PM _{2.5}	77.8	0.078
SO ₂	-	-
NO _x	-	-
CO	-	-
VOC	34.33	34.33
Lead	-	-
Highest HAP Prior to Construction	-	-
Highest HAP After Construction (Styrene; CAS# 100-42-5)	34.33	34.33
Total HAP Emissions	34.33	34.33

OPERATING PERMIT STATUS

This is a Title V operating permit renewal.

REGULATORY APPLICABILITY REVIEW

Regulation	Comments/Periodic Monitoring Requirements
Section II.E - Synthetic Minor	This facility is a major for HAPs emissions. But the facility has not taken federally enforceable limit. It does not have any synthetic minor limits.
Standard No. 1	Not applicable as this facility does not have any fuel burning sources.



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Regulation	Comments/Periodic Monitoring Requirements																		
Standard No. 3 (state only)	Not applicable as no processes at the facility contain waste combustion or reduction sources.																		
Standard No. 4	<p>The facility is subject to Opacity and PM emissions.</p> <p>Opacity will be 20% for equipments installed after December 31, 1985 and 40% on or before December 31, 1985.</p> <table><tr><th>OP ID</th><th>Opacity</th><th>Process Weight Rate, Tons/hr</th><th>PM Allowable, lb/hr</th><th>Uncontrolled Emissions, lb/hr</th><th>Controlled Emissions, lb/hr</th></tr><tr><td>004</td><td>20%</td><td>-</td><td>-</td><td>-</td><td>-</td></tr><tr><td>005</td><td>20%</td><td>0.765 (total)</td><td>3.43 (total)</td><td>17.7626</td><td>0.177</td></tr></table> <p>The following operation and maintenance checks will be made on at least a weekly basis for all baghouses:</p> <p>a) The baghouse cleaning systems will be checked for proper operation.</p> <p>b) Check dust collection hoppers and conveying systems for proper operation.</p>	OP ID	Opacity	Process Weight Rate, Tons/hr	PM Allowable, lb/hr	Uncontrolled Emissions, lb/hr	Controlled Emissions, lb/hr	004	20%	-	-	-	-	005	20%	0.765 (total)	3.43 (total)	17.7626	0.177
OP ID	Opacity	Process Weight Rate, Tons/hr	PM Allowable, lb/hr	Uncontrolled Emissions, lb/hr	Controlled Emissions, lb/hr														
004	20%	-	-	-	-														
005	20%	0.765 (total)	3.43 (total)	17.7626	0.177														
Standard No. 5	Not applicable as this facility is exempt from this regulation based on the date of construction. (This facility was not in existence or under construction on July 1, 1979).																		
Standard No. 5.2	Not applicable as this facility does not include any sources subject to this standard.																		
Standard No. 7	Not applicable as the facility’s actual emissions of any pollutant are less than 250 TPY, and the facility is not major for PSD.																		
61-62.6	The fugitive PM emissions are controlled in such a manner as to minimize fugitive emissions.																		
40 CFR 60 and 61-62.60	<p>Not applicable as the facility does not contain sources subject to any NSPS standards.</p> <p><u>Subpart VVV – Standards Of Performance For Polymeric Coating Of Supporting Substrates Facilities:</u></p> <p>It is not applicable to this facility as per EPA-ADI,03/20/2001, Subpart VVV Applicability to Pultrusion Facilities, Control Number: 0300037. It indicates <i>Subpart VVV does not apply to pultrusion facilities. The operating characteristics of the pultrusion process is different from the polymeric coating process that is covered by Subpart VVV. Subpart VVV applies to those polymeric coating processes where solvents are intentionally volatilized out of the coating as a necessary part of the process. In the pultrusion process, the volatile organic compound (styrene) is a reactant, not a solvent. The styrene predominantly becomes an integral part of the final product.</i></p>																		
40 CFR 61 and 61-62.61	Not applicable as none of the subparts apply to this facility.																		
40 CFR 63 and 61-62.63	<p>Applicable as this facility’s HAPs emissions are greater than 10 TPY for single HAP and 25 TPY for total HAPs.</p> <p><u>Subpart WWWW-National Emissions Standards For Hazardous Air Pollutants: Reinforced Plastic Composites Production:</u></p> <p>It is applicable to Unit ID 04 as per 40 CFR §63.5785 (a).</p>																		
61-62.68	Not applicable as this facility does not store or use chemicals subject to 112(r) above the threshold quantities.																		
40 CFR 64	This process PTE exceeds Title V threshold limits (PTE for HAPs emissions >10/25 TPY) but the process does not have control equipment associated with it and the facility is not a major for PM ₁₀ emissions.																		

AMBIENT AIR STANDARDS REVIEW

Regulation	Comments/Periodic Monitoring Requirements
Standard No. 2	This facility has demonstrated compliance through modeling; see modeling summary dated December 14, 2015.
Standard No. 7.c	This facility has demonstrated compliance through modeling; see modeling summary dated



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Regulation	Comments/Periodic Monitoring Requirements
	December 14, 2015.
Standard No. 8 (state only)	This facility has demonstrated compliance through modeling; see modeling summary dated December 14, 2015.

PUBLIC NOTICE

This Title V Permit will undergo a 30-day public notice period and a 45-day EPA comment period in accordance with SC Regulation 61-62.1, Section II.N. This permit was placed in the Newberry Observer on June 10, 2016. The comment period was open from June 10, 2016 to July 9, 2016 and was placed on the BAQ website during that time period.

SUMMARY AND CONCLUSIONS

It has been determined that this source, if operated in accordance with the submitted application, will meet all applicable requirements and emission standards.